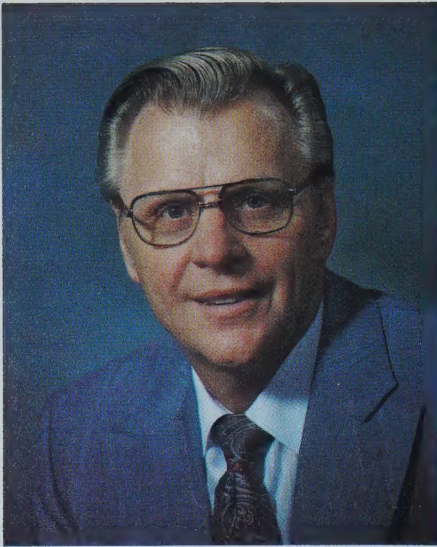


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**MERLAND  
EXPLORATIONS  
LIMITED**



annual report nineteen hundred and seventy eight



R. K. DIXON  
President

*"The Company's various activities during the past year have placed Merland as one of the most active junior oil & gas companies in Canada."*

## 1978 Highlights

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1. Net earnings and cash flow in 1978 increased to \$4,148,509 and \$8,393,568 or up 106% and 53% respectively.
2. Gas production increased from an average of 31.4 MMCFD in 1977 to 33.4 MMCFD in 1978.
3. Gas production from projects in the United States, such as Mitchell Creek, Corpus Christi, North Simsboro and West Texas, were put on production during the year and are now contributing significantly to the Company's cash flow.
4. Oil production increased from an average of 160 BPD in 1977 to 252 BPD in 1978.
5. Exploration and development drilling and land acquisition continued at a record pace in Western Canada and the United States.
6. Proven gas reserves in Alberta, net of royalty and 1978 production, increased approximately 30 BCF during the year.



# HIGHLIGHTS

	1978	1977	1976	1975	1974
<b>FINANCIAL (\$000)</b>					
Gross sales before royalties .....	\$18,727	\$14,467	\$ 9,148	\$ 3,660	\$ 1,301
Sales net of royalties .....	12,744	9,383	5,698	2,594	976
Net earnings (loss) .....	4,149	2,016*	1,128*	(53)*	(424)*
Per share .....	.70	.34*	.22*	(.01)*	(.09)*
Cash flow from operations .....	8,394	5,469	3,106	1,850	582
Per share .....	1.41	.93	.62	.40	.13
<b>OPERATING</b>					
Production					
Natural gas					
- Billions of cubic feet .....	12.2	11.5	9.6	7.3	5.5
- Millions of cubic feet per day ..	33.4	31.6	26.3	20.1	15.1
Oil and Natural gas liquids					
- barrels .....	92,089	64,556	42,172	15,770	6,315
- barrels per day .....	252	177	116	43	17
Acreage (000 acres ) +					
Gross .....	1,090	886	493	487	600
Net .....	352	297	162	165	236
Drilling record					
Wells drilled (gross)					
Gas .....	114	98	61	121	68
Oil .....	12	14	14	11	7
Dry .....	35	21	28	13	11
Producing wells (cumulative)					
Gross .....	688	687	600	536	409
Net .....	384	369	326	290	215

\*Restated for changes in accounting policy.

+ As of date of report.



# *To the Shareholders*

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I am very pleased to report to the shareholders of MERLAND EXPLORATIONS LIMITED that despite the serious cut-backs in natural gas sales by gas purchasers, the year 1978 saw the continued success and growth of our Company.

Net earnings for 1978 amounted to \$4,148,509, an increase of approximately 106% over 1977 restated earnings and earnings per share in 1978 were 69.5 cents which is an increase of 104% over restated 1977 earnings per share.

Cash flow from operations increased 53% over 1977 to \$8,393,568 in 1978 and cash flow per share increased 52% over 1977 to \$1.41 in 1978.

The Company's excellent working capital position at December 31, 1978, reflects the combined results of the highly successful operations of the Company and the restructured long-term debt financing during 1978. The Company is now in an excellent financial position to continue its aggressive acquisition and exploration posture.

Capital expenditures for exploration, development, and petroleum and natural gas property acquisitions amounted to \$16,614,481 in 1978 and demonstrated the Company's philosophy of expanding its petroleum and natural gas holdings, increasing its reserve base and increasing production facilities.

The increase in earnings from oil and gas production improved substantially during 1978 as additional wells were drilled and put on production in Canada and gas and condensate production began with somewhat higher rates in the United States.

During 1978 MERLAND continued its policy of aggressive expansion in the shallow gas areas of Alberta and Saskatchewan as well as the medium depth gas areas of east central Alberta. In addition, MERLAND expanded its land holdings in areas of deeper oil and gas potential in Alberta and the United States. MERLAND also established itself as an operating company in the United States and it is hoped that more of our projects in the United States can be self-operated in the future.

The Company's various activities during the past year have placed MERLAND as one of the most active junior oil and gas companies in Canada.

## **Production**

The gas production cut-backs by gas purchasers, which began in 1977, became more severe during 1978 due to the oversupply of natural gas in Canada and the United States. These cut-backs resulted in minimum rates of take by gas purchasers and in many instances "take-or-pay" provisions of the gas sales contracts were invoked. It is probable that these production cut-backs in Canada will continue for several years until additional export gas markets can be located and arranged for in the United States. It is hoped that the gas sales restrictions in the United States will be reduced or eliminated in the very near future now that the gas deregulation legislation has been passed.

In spite of these gas production restrictions, MERLAND's average gas producing rate increased from 31.4 MMCFD in 1977 to 33.4 MMCFD in 1978, an increase of 5.5 %, compared to a slight

decline of approximately 4 % in the overall industry. At the end of 1978, MERLAND's total gas sales were averaging approximately 46 MMCFD with approximately 90 % coming from Canadian projects and 10 % from United States projects. This compares with a gas producing rate of 39.5 MMCFD at the end of 1977.

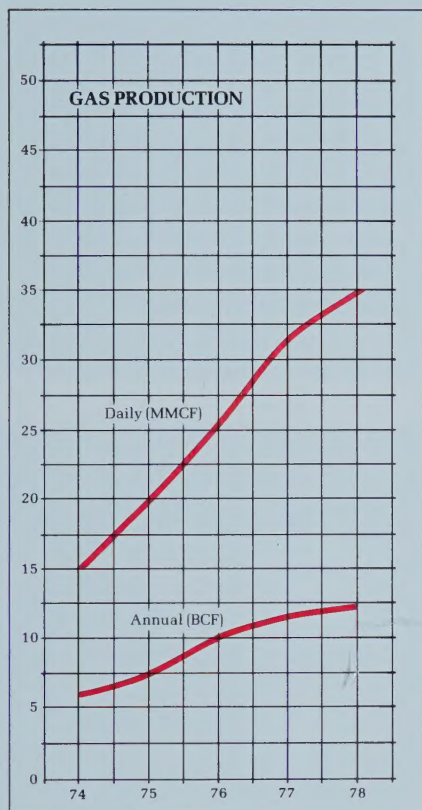
Average daily oil and hydrocarbon liquid production increased from 160 BPD in 1977 to 252 BPD in 1978 and was averaging approximately 450 BPD at the end of the year.

Gas and oil prices in Canada increased slightly during the year. However, a good portion of these price increases, particularly for gas, were offset by higher transportation costs.

After several years of negotiating with the Alberta Government, the Crown royalty on low volume gas producing wells was reduced on August 1, 1978, according to a sliding scale similar to the Crown crude oil royalty schedule. This reduction in Crown royalty will have a significant positive impact on MERLAND's net earnings and cash flow.

The selling price for the Company's gas production in Saskatchewan increased from 40 cents per MCF to 53 cents per MCF during the past year. Considering the Crown royalty of 2 cents per MCF and the relatively high productivity of the wells, natural gas exploration and production in Saskatchewan is becoming more economical. However, a serious shortage of gas markets still exists in Saskatchewan, making it very difficult to justify large investments in that province.





in Note 6 to the Financial Statements.

Highlights of MERLAND's financial results are as follows:

### Revenue

Sales of petroleum and natural gas in the amount of \$18,726,542 have increased 29% over 1977 as a result of volume increases amounting to 9% and average price increases amounting to 20%. The cut-backs in production imposed by gas purchasers during 1978 affected the Company's sales by approximately 15% or in excess of \$2,000,000.

Royalties amounting to \$5,982,494 have increased only 18% over 1977. As a result of the combination of sales increases and lower royalties, net sales after royalties were \$12,744,048 for 1978, a net increase of 36% over 1977.

### Expenses

Production as well as general and administrative expenses increased only slightly over 1977 as a result of careful management and efficient production practices.

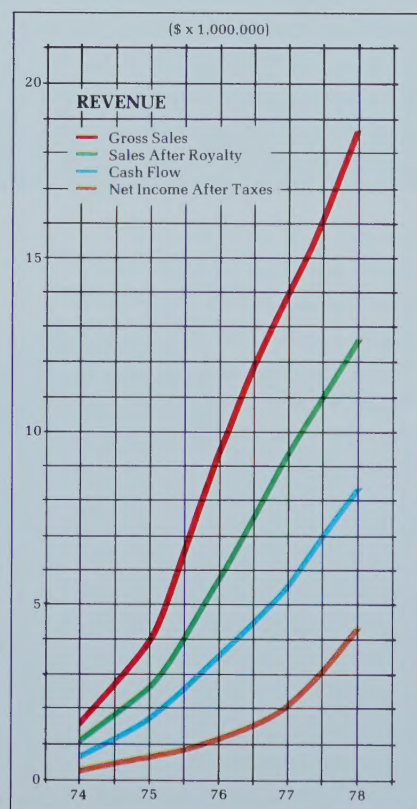
During the year the Company retroactively adopted the full cost method of accounting for petroleum and natural gas properties which is more widely accepted in the industry than was the Company's former area of interest method. Details of this change are more fully described in Note 2 to the Financial Statements. For comparative purposes, depletion and depreciation have been restated for 1977 giving effect to the retroactive change to the full cost method. Depletion

and depreciation for 1978 has decreased in comparison to the restated 1977 figures as a result of the net acquisition in 1978 of gas properties in Saskatchewan which increased reserves significantly at a very low cost to the Company.

Had the Company followed the former area of interest method of calculating depletion and depreciation, after tax earnings per share would have been reduced by 13.5 cents in 1978 and 1.7 cents in 1977 as described in Note 2 to the Financial Statements.

### Financial

MERLAND's remarkable growth trend has continued through 1978 and is reflected in the financial results of the Company. The Company's financial position has strengthened significantly during 1978 for the following two main reasons. Firstly, competent and aggressive business operating practices resulting in increased earnings and cash flow; and secondly, restructuring of the Company's long-term debt obligation through the placement of ten year income debentures with a Canadian chartered bank, which has provided increased financial flexibility in addition to the normal production loan facilities. The details of the long-term debt are more fully described





During the latter part of 1978 and the early part of 1979, MERLAND negotiated a joint venture agreement with a European investment group whereby the investors will participate with MERLAND in all of MERLAND's new exploration ventures in Canada and United States. Under this agreement MERLAND will receive a significant benefit as operator.

This agreement is subject to approval from the Foreign Investment Review Agency. It is expected that this association will add approximately \$5,000,000 per year to MERLAND's exploration budget which will enable the Company to purchase additional petroleum and natural gas properties and enter into more new projects.

MERLAND anticipates that the financial success, growth in earnings and strong financial position of 1978 will continue through 1979 and future years.

#### Personnel

I must thank the staff of MERLAND for their determination and devotion displayed in keeping oil and gas production at a maximum, developing new and exciting geological ideas and projects, locating additional exploratory acreage on which to grow, carrying out all necessary phases of field operations and the other complex financial and administrative tasks of keeping an active company like MERLAND on the move.

Our Company now employs 77 full-time personnel. Collectively these employees are substantial owners of MERLAND common

stock obtained through the Company's stock purchase and profit sharing plans.

#### Outlook

MERLAND has now reached a point in its growth where it can, from a financial point of view, enter most oil and gas exploration and development projects that it considers to have merit. Your Company intends to continue to increase its land holdings in Western Canada and the United States and to participate in new exploration ventures in both countries.

Gas and oil production from both Canada and the United States should be at historical maximums for MERLAND during 1979 as previously discovered and developed reserves are put on continuous production and new reserves are developed. It is expected that gross sales will exceed \$25,000,000 during 1979 with cash flows and net earnings substantially above 1978 levels.

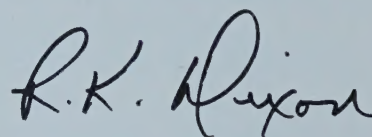
Capital expenditures for the year 1979 are expected to be approximately \$23,000,000 of which 12% will be spent in the United States and 88% in Canada.

It is expected that 1979 will see the resumption of escalating gas prices in keeping with rising oil prices. There now appears to be acceptance of the fact that increased earnings for oil and gas exploration companies will lead to increased investment by the industry which will result in additional oil and gas discoveries and therefore increased proven reserves.

It appears inevitable that the National Energy Board's decision

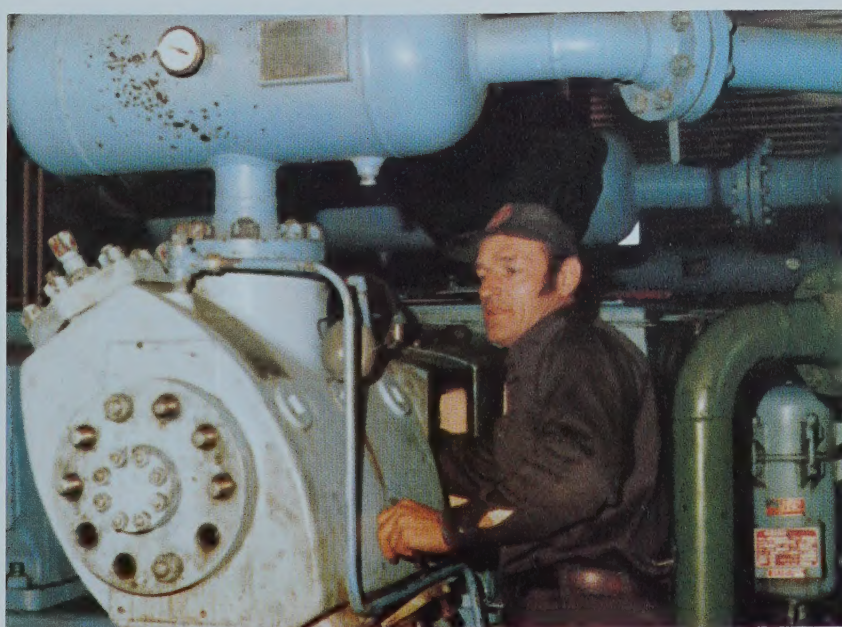
that Canada has a surplus of natural gas for export should ease the marketing problem for the gas industry as a whole and MERLAND in particular. Any increase in exports should eliminate or reduce effects of the "minimum day" and "take-or-pay" provisions in our gas contracts for a number of our projects.

On Behalf of the Board of Directors



President







# Operations

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The following is a resume of some of the more active oil and gas producing properties in which MERLAND participated during 1978 in Canada and the United States.

## CANADA

### Conlac,

At the year-end MERLAND's net production from this project was averaging 14.6 MMCFD from 136 producing wells. Gross production was averaging 17.1 MMCFD or 126 MCFD per well. Besides the 9 new wells that were drilled during 1978, reworks were performed on the Milk River formation in 10 wells with excellent success, increasing production from these wells from less than 40 MCFD to an average of approximately 200 MCFD. This was the first attempt at re-stimulating the shallow Milk River formation in this area and it is planned to carry out more of these stimulation treatments in the future. In late December of 1978 MERLAND's interest in the Conlac Project decreased from 100% to 61.83% as a result of the payout of the Company's investment in this area.

### Vale and South Vale,

The Vale Project comprises over 20,000 acres which is owned nearly 100% by MERLAND. Net gas production from the area was averaging over 7 MMCFD in December 1978, a two-fold increase from early 1978. This increase in production was obtained by the drilling and completion of 9 new wells and the restimulation of 15 existing wells.

An extensive drilling program intended to increase gas production to over 13 MMCFD will be completed by late summer.

South Vale, a new project acquired in 1978 consisting of approximately 12,000 acres, was producing over 1 MMCFD from 6 wells at the end of the year. By 1979 year-end gas production is expected to rise to over 3 MMCFD with the drilling of an additional 12 wells. At least one deep test will be drilled in South Vale in early 1979.

### Hilda,

In March 1978 MERLAND commenced production from 35 wells in this shallow gas area. Gross daily production was 6 MMCFD with MERLAND's net gas production for the year of 558.4 MMCF. Production from this area was restricted by TransCanada PipeLines by approximately 7% of the normal production volume during the year.

### Horsham,

The revenue from this Saskatchewan property quadrupled in 1978 due to an increase in the gas price and excellent results in the drilling of 6 new wells. The gas production rate near the year-end exceeded 5.6 MMCFD compared to 3.4 MMCFD in early 1978. The gas price in this area increased from 40 cents per MCF to 53 cents per MCF during the year. There are presently 30 wells on production in this project.

### Taber,

Oil production from this project increased from 800 BPD to over

1,240 BPD during 1978. By early 1979 oil production reached 1,600 BPD as a result of drilling and completing 8 successful development wells. With the electrification of the field in 1978, this main oil producing area of MERLAND has become a very successful venture. Our Company's oil production was in excess of 67,000 barrels in 1978 and approximately 110,000 barrels of production are expected in 1979. There are 21 producing oil wells in the Taber area at the present time. In January 1979 oil shipments commenced via pipeline with a subsequent reduction of operating costs.

### Giroux Lake,

A total of 4 deep wells were drilled in this area in 1978 of which 3 were successful. Oil and/or gas was found in 2 horizons. The commencement of production and sale of oil and solution gas from this area is expected in late 1979 from 1 and possibly 2 of the oil wells. Further land acquisition and drilling of additional exploratory wells will continue in 1979.

### Wimborne,

Oil production commenced from this area in the middle of 1978, however, allowable restrictions curtailed MERLAND's net production to approximately 1,000 barrels for the year. Gross production at year-end from 3 wells was over 190 BPD. Additional development wells are planned in 1979.

### Jarrow-Birch Wavy,

MERLAND was extremely active in this area of east central Alberta



during 1978 and early 1979. A total of 21 wells were drilled in the area of which 13 were completed as gas wells. The Company plans additional development drilling on these lands in 1979 with production to commence by late fall of 1979. MERLAND's net production averaged 4.2 MMCFD in 1978 from a capability of 6.2 MMCFD as TransCanada PipeLines restricted production approximately 15 %. It is expected that productivity by 1979 year-end should more than double to over 13 MMCFD net to MERLAND.

#### Bantry,

Our Company's net gas production from the Bantry Project averaged 2.6 MMCFD in 1978 with an 8 % "take-or-pay" reduction in flow caused by TransCanada PipeLines' restriction. A total of 5 gas wells were drilled, cased and completed in the area during the year. Excellent gas production from the Bow Island formation was obtained with initial production rates of up to 1 MMCFD per well. Total gross production from the area was averaging 12.4 MMCFD at year-end or 3.2 MMCFD net to MERLAND.

#### UNITED STATES

Under our existing East Texas and South and Southwest Texas Programs, MERLAND continued the development of existing properties. MERLAND participated in the drilling of 10 development wells and 29 exploratory wells in these areas of the United States during 1978. In addition to drilling wells, additional acreage was acquired within areas which have semi-proven reserves.

#### Mitchell Creek,

The #1 C.E. Mayes well came on production in early September 1978. In December the well was averaging 10 MMCFD and 250 BPD of condensate at a flowing wellhead pressure of 2750 psi. MERLAND has a 23.5% working interest in this Smackover Formation project.

#### South Texas

A total of 4 deep wells were on production at the end of 1978 producing in excess of 5 MMCFD of natural gas and 200 BPD of liquids. 3 additional deep wells should be on production by spring of 1979 bringing the total deep production to over 7 MMCFD and 250 BPD of liquids. MERLAND's average net interest will be approximately 9% of the total. Fracture techniques of the sub-Anderson Sandstones are being investigated and attempts to fracture 2 or 3 wells will be made in the early spring. Of the 8 wells drilled in 1978, 6 were cased and completed as gas and liquid producers. Numerous pay zones were encountered in all wells.

#### CRUDE OIL & NATURAL GAS SALES (NET)

Project	1978	1977
Natural Gas (MMCF)		
Alderson South	—	72,248
Bantry	948,623	923,625
Birch Wavy	407,183	15,426
Big Bend North	139,711	142,311
Conlac (GBI)	4,383,329	5,015,724
* Elkwater	362,983	515,747
Halkirk	275,383	315,989
Hilda	558,371	—
Holden	238,027	314,832
Horsham	796,205	688,106
Jarrow	847,432	696,263
Medicine Hat North	880,882	839,443
Vale	1,493,961	1,550,981
** Vale-South	18,785	—
Viking West (Non-Unit)	18,258	—
Westlock	302,810	274,218
Others	60,451	28,838
	<u>11,732,394</u>	<u>11,393,751</u>
East Texas-Orbit	330,381	107,653
East Texas-Canus	44,442	35,829
South Texas-Canus	32,457	—
Southwest Texas-Canus	30,481	—
	<u>437,761</u>	<u>143,482</u>
Total	<u>12,170,155</u>	<u>11,537,233</u>
Crude Oil & Liquids (Bbls.)		
Taber	67,106	40,543
Wimborne	1,976	—
Others	990	11,836
	<u>70,072</u>	<u>52,379</u>
East Texas-Orbit	7,512	—
East Texas-Canus	13,010	12,177
South Texas-Canus	1,365	—
Southwest Texas-Canus	130	—
	<u>22,017</u>	<u>12,177</u>
Total	<u>92,089</u>	<u>64,556</u>

\* Conversion from 50% W.I. to 25% W.I. Oct. 31/78

\*\* On stream Oct. 17/78











# MERLAND EXPLORATIONS LIMITED

AND SUBSIDIARY COMPANIES

## CONSOLIDATED STATEMENT OF EARNINGS

Year ended December 31, 1978

	<u>1978</u>	<u>1977</u>
		(Restated)
REVENUE		
Sales of petroleum and natural gas .....	\$18,726,542	\$14,467,184
Less royalties .....	<u>5,982,494</u>	<u>5,083,990</u>
	12,744,048	9,383,194
Interest .....	262,298	53,873
Unrealized gain on foreign currency translation .....	<u>192,000</u>	<u>—</u>
	<u>13,198,346</u>	<u>9,437,067</u>
EXPENSES		
Production .....	2,322,119	2,092,961
General and administrative .....	1,185,328	1,317,772
Organization and share issue expense .....	—	134,819
Interest on long-term debt .....	2,210,241	1,450,615
Depletion .....	1,434,660	1,538,057
Depreciation .....	<u>445,038</u>	<u>672,468</u>
	<u>7,597,386</u>	<u>7,206,692</u>
EARNINGS BEFORE INCOME TAXES .....	5,600,960	2,230,375
INCOME TAXES (Note 8)		
Deferred .....	2,365,361	1,107,725
Alberta royalty tax credit .....	<u>(912,910)</u>	<u>(893,642)</u>
	<u>1,452,451</u>	<u>214,083</u>
NET EARNINGS (Note 2) .....	<u>\$ 4,148,509</u>	<u>\$ 2,016,292</u>
EARNINGS PER SHARE .....	<u>69.5¢</u>	<u>34.1¢</u>





# MERLAND EXPLORATIONS LIMITED

AND SUBSIDIARY COMPANIES

## CONSOLIDATED BALANCE SHEET

December 31, 1978

### Assets

	<u>1978</u>	<u>1977</u> (Restated)
<b>CURRENT ASSETS</b>		
Cash and term deposits .....	\$ 6,494,496	\$ —
Accounts receivable .....	3,826,858	3,479,908
Prepaid expenses and other .....	<u>91,717</u>	<u>181,242</u>
	<u>10,413,071</u>	<u>3,661,150</u>
 PROMISSORY NOTE (Note 3) .....	 212,000	 212,000
 PIPELINE AID IN CONSTRUCTION LOANS (Note 4) .....	 316,332	 366,936
 <b>PROPERTY, PLANT AND EQUIPMENT (Notes 2 and 5)</b>		
Petroleum and natural gas properties and production equipment .....	47,217,830	32,945,076
Accumulated depletion and depreciation .....	<u>(6,477,740)</u>	<u>(4,614,919)</u>
	<u>40,740,090</u>	<u>28,330,157</u>
 On behalf of the Board:		
 <u>R.K. Dixon</u> , Director		
 <u>C. L. Matthews</u> , Director		
 March 27, 1979		
	<u><u>\$51,681,493</u></u>	<u><u>\$32,570,243</u></u>



## Liabilities

	<u>1978</u>	<u>1977</u> (Restated)
CURRENT LIABILITIES		
Outstanding cheques less cash on deposit .....	\$ —	\$ 568,472
Demand bank loan .....	—	1,094,200
Accounts payable and accrued liabilities .....	<b>6,272,573</b>	4,223,643
Current portion of long-term debt .....	<u>—</u>	<u>2,285,760</u>
	<b>6,272,573</b>	8,172,075
DEFERRED NATURAL GAS REVENUE .....	<b>497,994</b>	—
LONG-TERM DEBT (Note 6) .....	<b>27,966,000</b>	14,330,140
DEFERRED INCOME TAXES .....	<b>4,599,095</b>	2,233,734

## Shareholders' Equity

SHARE CAPITAL (Note 7)		
Authorized - 7,500,000 shares without par value		
Issued - 5,997,625 (1977 - 5,934,777) .....	<b>6,650,766</b>	6,287,738
RETAINED EARNINGS (Note 2) .....	<b>5,695,065</b>	<u>1,546,556</u>
	<b>12,345,831</b>	7,834,294
	<u><b>\$51,681,493</b></u>	<u><b>\$32,570,243</b></u>





# MERLAND EXPLORATIONS LIMITED

AND SUBSIDIARY COMPANIES

## CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

Year ended December 31, 1978

	<u>1978</u>	<u>1977</u>
WORKING CAPITAL DERIVED FROM		
Operations .....	\$ 8,393,568	\$ 5,469,361
Sale of income debentures .....	27,966,000	—
Long-term bank loan .....	10,130,000	4,600,000
Issue of share capital .....	363,028	2,470,206
Sale of property, plant and equipment .....	2,324,850	333,413
Decrease in pipeline aid in construction loans .....	50,604	—
Deferred natural gas revenue .....	497,994	—
	<u>49,726,044</u>	<u>12,872,980</u>
WORKING CAPITAL APPLIED TO		
Purchase of property, plant and equipment .....	16,614,481	10,341,446
Repayment of long-term bank loan .....	24,460,140	2,285,760
Conversion of income debentures to share capital .....	—	2,082,500
Reduction of deferred natural gas revenue .....	—	71,296
Loan to an officer and director .....	—	212,000
Funds advanced under pipeline aid in construction loans .....	—	366,936
	<u>41,074,621</u>	<u>15,359,938</u>
INCREASE (DECREASE) IN WORKING CAPITAL .....	8,651,423	(2,486,958)
Working capital (deficiency) at beginning of year .....	<u>(4,510,925)</u>	<u>(2,023,967)</u>
WORKING CAPITAL (DEFICIENCY) AT END OF YEAR .....	<u>\$ 4,140,498</u>	<u>\$ (4,510,925)</u>

## CONSOLIDATED STATEMENT OF RETAINED EARNINGS

Year ended December 31, 1978

	<u>1978</u>	<u>1977</u>
RETAINED EARNINGS AT BEGINNING OF YEAR		
As previously reported .....	\$ 2,654,559	\$ 739,719
Change in accounting policy (Note 2) .....	<u>(1,108,003)</u>	<u>(1,209,455)</u>
As restated .....	1,546,556	(469,736)
Net Earnings .....	<u>4,148,509</u>	<u>2,016,292</u>
RETAINED EARNINGS AT END OF YEAR .....	<u>\$ 5,695,065</u>	<u>\$ 1,546,556</u>





# MERLAND EXPLORATIONS LIMITED

AND SUBSIDIARY COMPANIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 1978

### 1. Significant accounting policies

(a) Principles of consolidation

The consolidated financial statements include the accounts of the Company and its subsidiaries, all of which are wholly-owned.

(b) Property, plant and equipment

During 1978 the Company retroactively changed its accounting policy from the area of interest method to the full cost method of accounting for petroleum and natural gas properties and related expenditures. Under the full cost method, all costs related to the exploration and development of petroleum and natural gas reserves are capitalized recognizing separate Canadian and United States cost centres. Such costs include those related to lease acquisitions, geological and geophysical activities, carrying charges of non-producing properties, drilling of productive and non-productive wells and overhead related to exploration and development.

Depletion of petroleum and natural gas properties and depreciation of production equipment are calculated on the unit-of-production method based upon estimated proven reserves as determined by independent engineers. Other equipment is depreciated at rates of 10% - 30% calculated on a declining balance basis.

(c) Income taxes

The Company follows the tax allocation method of accounting for all timing differences between taxable income and net earnings. Under this method, provision for deferred income taxes is made on the excess of deductions for income tax purposes over the related depletion, depreciation and other charges recorded in the financial statements.

(d) Foreign currency translation

The foreign currency accounts of the Company and its United States subsidiary are translated to Canadian dollars as follows:

Current assets and current liabilities at the rate of exchange prevailing at the end of the year;

Other assets and liabilities at the rate of exchange in effect on the dates the assets were acquired or the obligations were incurred;

Revenue and expenses at the average rate of exchange in effect during the year with the exception of depletion and depreciation, which reflect the rate in effect when the related assets were acquired.

All gains and losses arising from foreign currency translation are included in the determination of net earnings.

(e) Joint interest operations

Substantially all of the Company's petroleum and natural gas exploration and production activities are conducted jointly with others and accordingly these financial statements reflect only the Company's proportionate interest in such activities.

### 2. Change of accounting policy

The Company's retroactive change to the full cost method of accounting for petroleum and natural gas properties had the effect of increasing 1978 and 1977 net earnings and decreasing retained earnings at January 1, 1977 as follows:

	Net Earnings		Retained Earnings
	1978	1977	January 1, 1977
Reversal of gain on sale of petroleum and natural gas properties .....	\$ (602,091)	\$ (79,143)	\$(1,984,089)
Decrease in depletion .....	1,068,754	143,992	275,224
Decrease in depreciation .....	375,465	61,712	30,580
	842,128	126,561	(1,678,285)
Decrease (increase) in income taxes .....	(38,162)	(25,109)	468,830
Increase (decrease) in net earnings and retained earnings .....	\$ 803,966	\$ 101,452	\$(1,209,455)
Increase in earnings per share .....	13.5¢	1.7¢	



### 3. Promissory note

The promissory note, which is non-interest bearing and due in 1980, represents funds advanced by a subsidiary to an officer and director for the purpose of acquiring shares of Merland Explorations Limited.

### 4. Pipeline aid in construction loans

These loans represent the Company's share of prepaid pipeline construction costs under natural gas sales contracts. The loans are being repaid at fixed rates based on natural gas throughput.

5. Property, plant and equipment	December 31, 1978			1977 (Restated)
	Cost	Accumulated Depletion and Depreciation	Net Book Value	Net Book Value
Canada				
Petroleum and natural gas properties .....	\$27,132,541	\$ 3,894,309	\$23,238,232	\$16,290,216
Production equipment, gas plants and other equipment .....	10,656,709	1,844,699	8,812,010	7,506,901
	<u>37,789,250</u>	<u>5,739,008</u>	<u>32,050,242</u>	<u>23,797,117</u>
United States				
Petroleum and natural gas properties .....	8,154,087	636,040	7,518,047	4,025,770
Production equipment, gas plants and facilities .....	1,274,493	102,692	1,171,801	507,270
	<u>9,428,580</u>	<u>738,732</u>	<u>8,689,848</u>	<u>4,533,040</u>
Total .....	<u>\$47,217,830</u>	<u>\$ 6,477,740</u>	<u>\$40,740,090</u>	<u>\$28,330,157</u>

### 6. Long-term debt

Long-term debt represents \$20,000,000 Canadian and \$7,000,000 U.S. of income debentures held by a Canadian chartered bank bearing interest at 50% of the bank's prime lending rate plus 1 1/8% to 1 1/2%. Certain of the Company's Canadian producing petroleum and natural gas properties are pledged as security for the debt. The debentures are due in 1988 with minimum annual principal repayments commencing in September, 1983 of \$4,194,900 for two years, \$5,593,200 for one year and \$6,991,500 for the remaining two years.

### 7. Share capital

During the year, the following shares were issued:

	1978		1977	
	Number	Value	Number	Value
On conversion of \$2,082,500 principal amount of 7% convertible income debentures .....	—	\$ —	749,700	\$2,082,500
Issued for cash				
To an officer and director .....	—	—	80,000	212,000
To trustee of deferred profit sharing plan .....	10,843	59,635	8,159	37,531
Under employee share purchase plan .....	29,505	226,518	19,118	122,175
Upon exercise of share options .....	22,500	76,875	5,000	16,000
	<u>62,848</u>	<u>\$ 363,028</u>	<u>861,977</u>	<u>\$2,470,206</u>



At December 31, 1978 options granted to employees and an officer to purchase shares of the Company were outstanding as follows:

<u>Expiry date</u>	<u>Number</u>	<u>Option price</u>
October 5, 1980	7,500	\$3.85
July 19, 1981	20,000	\$5.50
August 7, 1981	16,000	\$5.50
	<u>43,500</u>	

The exercise of these options would have no dilutive effect on earnings per share.

## 8. Income taxes

The provision for income taxes differs from the result which would be obtained by applying the combined Canadian Federal and Provincial income tax rate of 47% to the earnings before income taxes. This difference results from the following items:

	<u>1978</u>		<u>1977 (Restated)</u>	
	<u>Amount</u>	<u>% of earnings before income taxes</u>	<u>Amount</u>	<u>% of earnings before income taxes</u>
Computed expected tax . . . . .	\$ 2,632,451	47.0	\$ 1,048,276	47.0
Increase (decrease) in taxes resulting from:				
Royalties and other payments to pro- vincial governments . . . . .	1,977,887	35.3	1,718,229	77.0
Provincial rebate . . . . .	(116,055)	(2.1)	(184,485)	(8.3)
Alberta royalty tax credit . . .	(912,910)	(16.3)	(893,642)	(40.1)
Federal resource allowance . . . . .	(1,482,013)	(26.5)	(1,022,333)	(45.8)
Tax depletion on Canadian production income . . . . .	(852,138)	(15.2)	(399,955)	(17.9)
Non-deductible interest on income debentures . . . . .	381,209	6.8	—	—
Other . . . . .	(175,980)	(3.1)	(52,007)	(2.3)
Income taxes . . . . .	<u>\$ 1,452,451</u>	<u>25.9</u>	<u>\$ 214,083</u>	<u>9.6</u>

## 9. Comparative figures

Certain comparative figures have been reclassified to conform to the current presentation.

## 10. Statutory information

During the year, the Company had ten directors and four officers, two of whom were also directors. Aggregate remuneration paid to officers for their services was \$171,590 (1977 - \$183,308, six officers) and to directors for their services was \$72,100 (1977 - \$53,900, 12 directors).



## AUDITORS' REPORT

To the Shareholders of Merland Explorations Limited

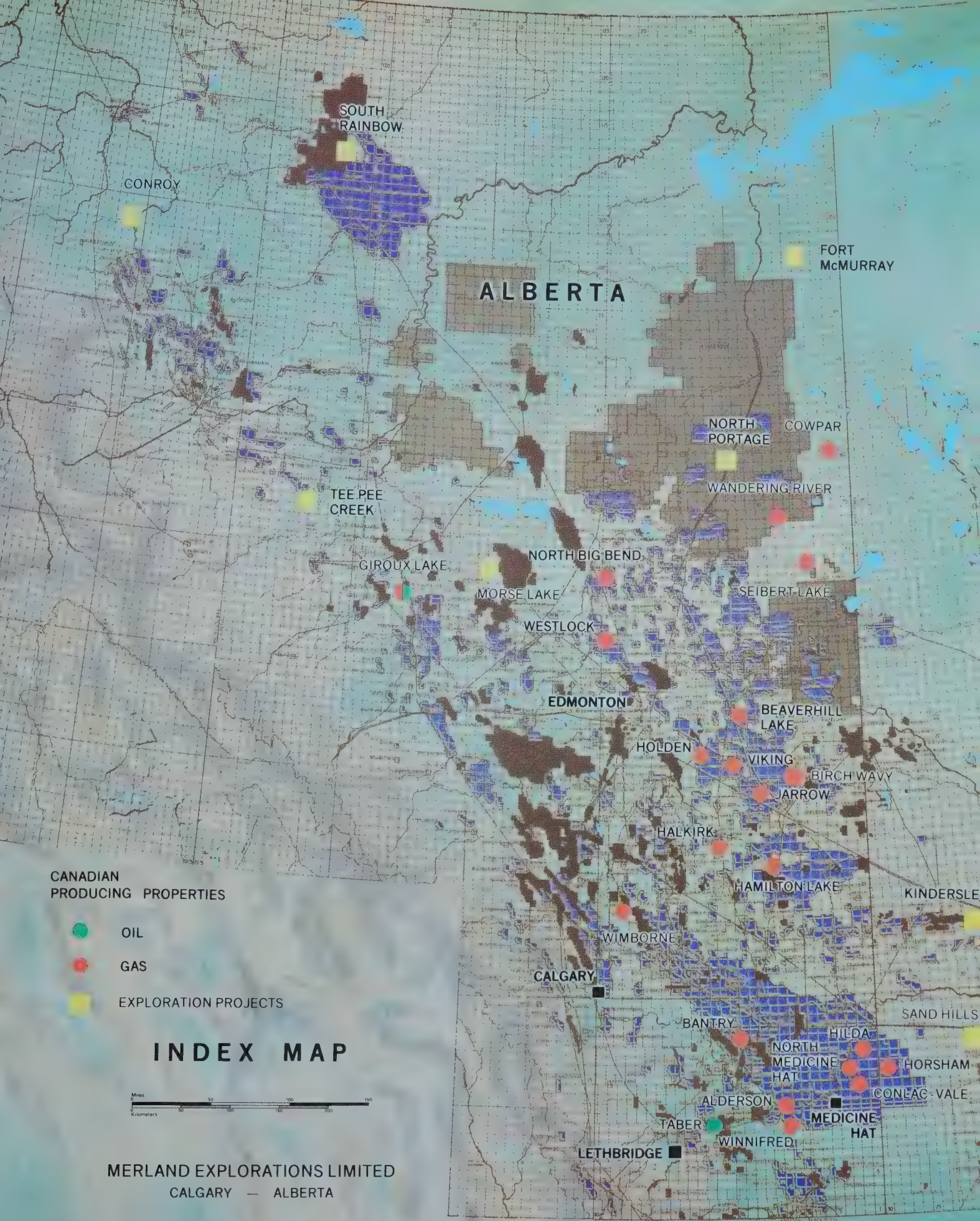
We have examined the consolidated balance sheet of Merland Explorations Limited as at December 31, 1978 and the consolidated statements of earnings, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the company as at December 31, 1978 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied, after giving retroactive effect to the change in accounting for petroleum and natural gas properties and related expenditures as more fully described in Note 2, on a basis consistent with that of the preceding year.

Calgary, Canada  
March 27, 1979

*Paul, Munro, Mitchell & Co.*  
Chartered Accountants





CANADIAN  
PRODUCING PROPERTIES

- OIL
- GAS

■ EXPLORATION PROJECTS

INDEX MAP



MERLAND EXPLORATIONS LIMITED  
CALGARY — ALBERTA



# Land Holdings

During the year 1978, MERLAND continued its active role of acquiring additional prime oil and gas properties which resulted in the following acreage position as of the date of this report:

	Gross Acres		Net Acres	
	1978	1977	1978	1977
Canada				
Alberta	851,963	658,640	284,184	210,350
Saskatchewan	72,151	65,111	40,141	60,198
British Columbia	19,923	18,550	6,637	6,183
	944,037	742,301	330,962	276,731
United States	145,788	143,912	21,197	20,340
TOTAL	1,089,825	886,213	352,159	297,071

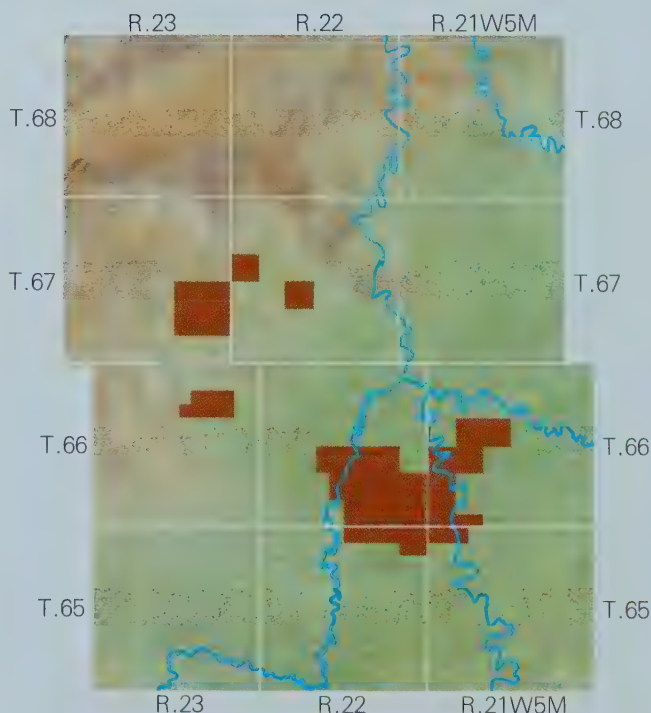
The most concentrated areas for acquisitions were Jarrow-Birch Wavy and Medicine Hat in the Province of Alberta where MERLAND already holds a substantial position.

MERLAND purchased 30,202 net acres in the Jarrow-Birch Wavy area, some of which are proven and semi-proven gas lands. It is expected that these lands will be drilled during the 1979 drilling season. Production from these newly drilled areas will be tied into our existing facilities and will contribute substantially to MERLAND's future production capacity.

In the Medicine Hat area (South Vale) MERLAND negotiated a multi-well farmout. Upon completion of the program, MERLAND will have drilled 20 wells to earn a 60 % working interest in 22 sections of Milk River and Medicine Hat "C" and "D" rights.

In addition to the Jarrow-Birch Wavy and Medicine Hat areas, MERLAND increased its land position in several other existing areas, such as Giroux Lake, Westlock, Wandering River, North Big Bend, Siebert Lake, Wimborne and Bantry. Within these areas MERLAND's net acreage increased to 86,219 acres, which has great potential for the further development of oil and gas reserves.

During 1978 MERLAND also pursued a number of new deeper exploration properties which have potentially higher reserves but involve higher risks. New areas which were pursued were Teepee Creek, Worsley, Stolberg, Alberta and Redeye, British Columbia. All of these fall within areas that hold great potential for finding oil and gas reserves. These new exploration properties increased MERLAND's land holdings by 6,833 net acres.

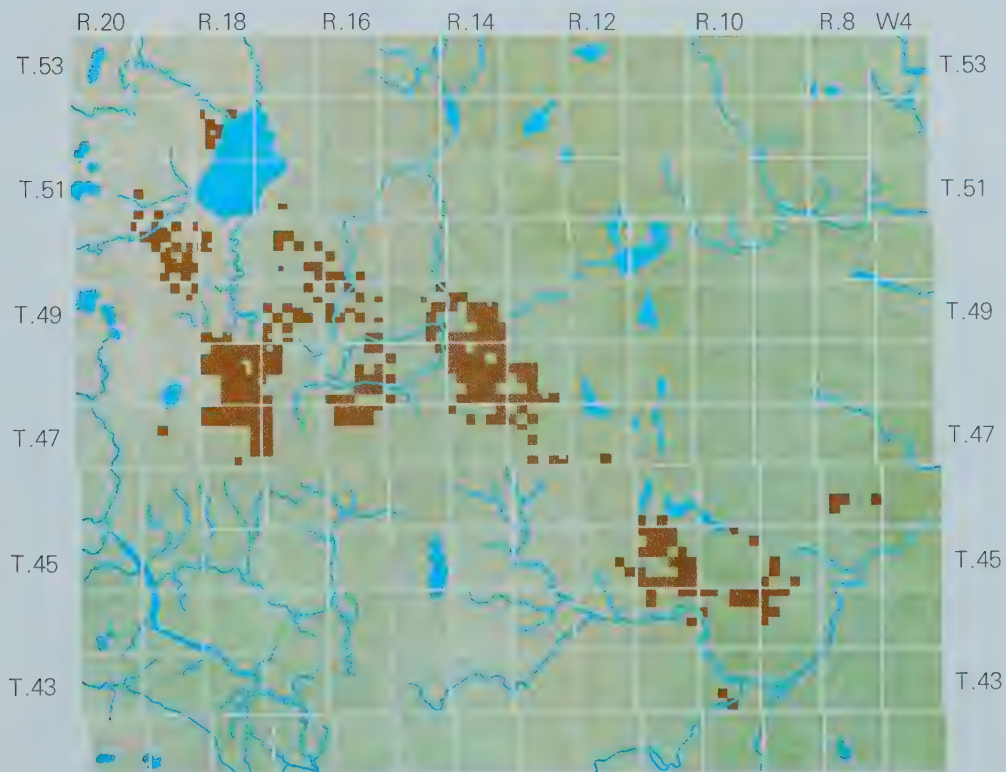


GIROUX LAKE AREA



MERLAND presently holds 72,151 gross acres in Saskatchewan. The Company sold a 50 % undivided working interest in its Sandhills properties during 1978. As a result of the sale, MERLAND's net acreage decreased from 60,198 net acres as reported in the 1977 annual report to 40,141 net acres in 1978. MERLAND plans to pursue the development of the Sandhills area in 1979 as there has been some encouragement regarding a gas sales contract in 1979 or 1980.

During 1978 MERLAND RESOURCES, INC. entered into an exploration agreement with Tri-Ex Corporation of Denver which provided the largest contribution to the increase in MERLAND's land holdings in the United States through projects in Wyoming and Louisiana. Our Company's participation with Tri-Ex Corporation, will continue during 1979 and should result in a significant increase in acreage holdings throughout the United States.



JARROW-BIRCH WAVY AREA



# Oil & Gas Reserves

The oil, natural gas and natural gas liquids reserves of MERLAND were evaluated as of December 31, 1978, considering new reserves acquired and/or discovered, reserves disposed of, and oil and gas production during the year.

The following is a summary of the Company's proven and probable oil and gas reserves, calculated before royalty, as of December 31, 1978. It should be noted that the oil and gas reserves contained in the 1977 annual report were as of April 24, 1978, the date of the report.

MERLAND's total proven and probable natural gas reserves before royalty are 298,763 MMCF and the Company's total crude oil and natural gas liquids reserves before royalty are 995,000 barrels.

During the past year MERLAND increased its gas reserves in Alberta by approximately 32,000 MMCF while at the same time producing approximately 12,200 MMCF. The Company's Saskatchewan gas reserves were reduced from those reported in the 1977 annual report by approximately 105,000 MMCF through the sale of 50 % of its undeveloped, non-producing Sand Hills acreage.

The Company's United States natural gas and crude oil reserves developed to date were determined by outside consultants using the volumetric method and the limited amount of production and geological information available at the present time. These estimates indicate that MERLAND's proven

and probable natural gas reserves before royalty deduction in the United States are 10,056 MMCF and the Company's crude oil and natural gas liquids reserves in the United States before royalty deductions are 144,000 barrels. Our Company believes that these reserves are conservative estimates and it is expected that these reserves will increase substantially once additional reservoir information becomes available through production.

	PROVEN		PROBABLE	
	Gas (MMSCF)	Crude Oil and Hydrocarbon Liquids (MSTB)	Gas (MMSCF)	Crude Oil and Hydrocarbon Liquids (MSTB)
<b>Alberta</b>				
Producing Properties	145,603	558	24,346	278
Non Producing Properties	<u>3,441</u>	<u>15</u>	<u>977</u>	<u>—</u>
TOTAL	<u>149,044</u>	<u>573</u>	<u>25,323</u>	<u>278</u>
<b>Saskatchewan</b>				
Producing Properties	8,840	—	—	—
Non Producing Properties	<u>105,500</u>	<u>—</u>	<u>—</u>	<u>—</u>
TOTAL	<u>114,340</u>	<u>—</u>	<u>—</u>	<u>—</u>
<b>United States</b>				
Producing Properties	<u>7,121</u>	<u>133</u>	<u>2,935</u>	<u>11</u>
GRAND TOTAL	<u>270,505</u>	<u>706</u>	<u>28,258</u>	<u>289</u>

# Exploration & Drilling

## Drilling

During the year 1978, MERLAND continued to be very active in exploration and development drilling in Canada and the United States. This activity includes the participation in 161 wells which represents an all time high for MERLAND. In addition, MERLAND purchased 9 shut-in gas wells which were located on purchased acreage.

The following is a summary of the various wells drilled and purchased during 1978:

	1978		
	Cased	Dry	Total
CANADA			
Exploration (Gas Projects)	27	18	45
Development (Gas all Projects)	56	8	64
Oil (Development all Projects)	11	2	13
Total Drilled	94	28	122
UNITED STATES			
Exploration	18	11	29
Development	10	0	10
Total U.S.A.	28	11	39
CANADA AND UNITED STATES			
Grand Total Drilled	122	39	161
Purchased Wells (Canada)	9	0	9
Grand Total including Purchased Wells	131	39	170

## EXPLORATION

### Canada

During 1978, MERLAND has concentrated its exploration in three main project types; the south central plains and northeastern Alberta, northwestern Alberta and northeastern British Columbia, and in the Giroux Lake, Taber and Wimborne fields where oil reserves have been developed.

In the plains area, MERLAND's exploration and development efforts were accelerated to meet an on-stream production date of November 1, 1979. Projects in this area have been evaluated and our Company expects, with further development drilling, to bring on stream approximately 30 BCF of additional gas reserves in late 1979.

An extensive land acquisition and seismic evaluation program in northeastern Alberta was completed in 1978 and the Company's drilling phase of the program has commenced. We are very encouraged by the initial results of the drilling performed in the first quarter of 1979. It is hoped that gas sales will commence from this area in late 1980.

In northwestern Alberta and northeastern British Columbia, MERLAND is concentrating its exploration in areas where deeper and more prolific gas and oil reserves can be found. Further exploration and drilling activity will continue in this area in 1979.

MERLAND will be participating in the development of the Stolberg Field in the immediate future and gas production could commence late in 1979 from these prolific deep seated Turner Valley thrust sheets. This venture is a first for MERLAND in the "Foothills Belt".

Our Company's oil exploration and development program has been accelerated in the Taber and Wimborne areas in 1978 and will continue in 1979. Further development drilling is also planned in our Giroux Lake field in 1979.

## United States

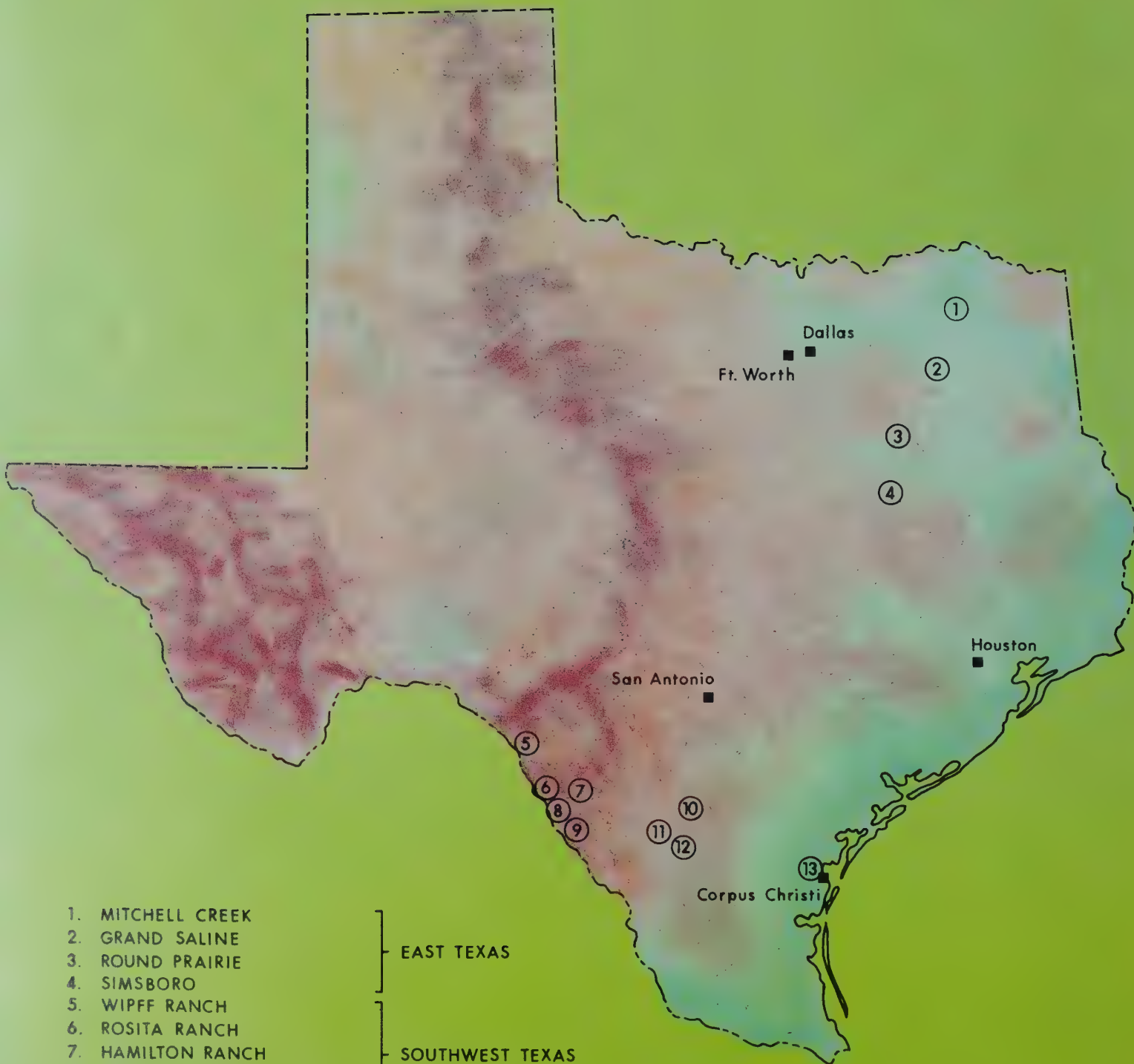
MERLAND participated in a total of 39 exploratory and development wells in the United States during 1978. Our drilling was primarily programmed for the Smackover and Cotton Valley reservoirs of East Texas, the deep sands in the Gulf Coast area of South Texas and Louisiana, and the development of shallower Olmos and Escondito gas reserves in Southwest Texas.

In East Texas, MERLAND participated in 10 exploratory and development wells. Of these various wells, completion attempts have resulted in 4 potential Cotton Valley gas producers and 1 Rodessa oil well.

In the Corpus Christi area of South Texas, MERLAND participated in 6 successful deep geopressured Lower Frio tests and 1 Upper Frio oil and gas well. These wells are part of a continuing program to develop high pressure gas and condensate reservoirs in this prolific hydrocarbon producing area.

A total of 21 wells were drilled in Southwest Texas. Of these various exploratory and development wells, 11 were cased as potential gas wells and 10 were abandoned. Further exploration in 1979 will continue in East and South Texas. In East Texas, MERLAND's main participation will be in developing the North Simsboro property. Our South Texas program will involve drilling approximately 15 shallow Olmos and Escondito gas prospects on lands presently controlled in Maverick and Dimmit Counties. This shallow program will compliment our on-going exploration in the Gulf Coast, Corpus Christi trend.





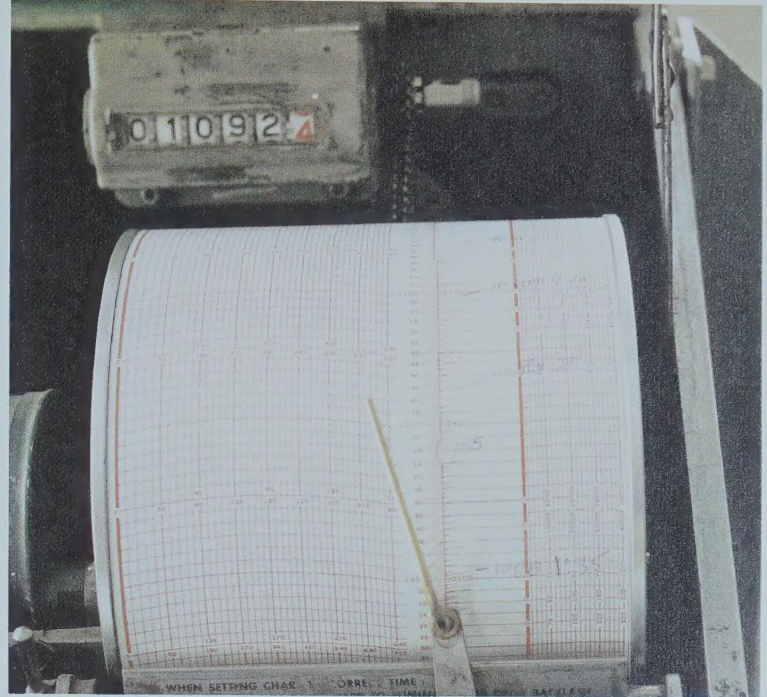
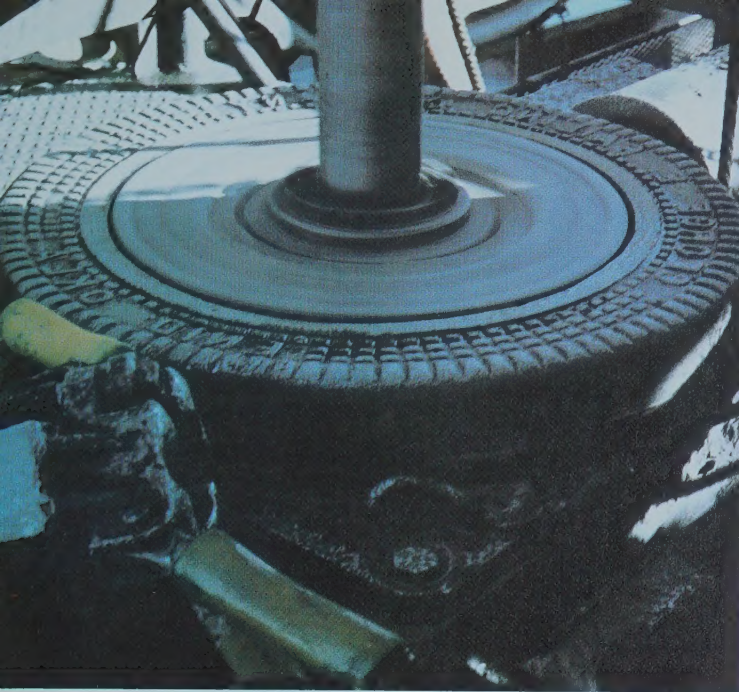
1. MITCHELL CREEK
2. GRAND SALINE
3. ROUND PRAIRIE
4. SIMSBORO
5. WIPFF RANCH
6. ROSITA RANCH
7. HAMILTON RANCH
8. STONE RANCH
9. CAGE
10. MIDWAY
11. MILLER
12. MAGUELLITOS
13. SAMPSON, SAXET, GOLIATH

EAST TEXAS

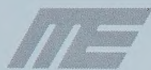
SOUTHWEST TEXAS

SOUTH TEXAS









# MERLAND EXPLORATIONS LIMITED

AND SUBSIDIARY COMPANIES

## HEAD OFFICE

402 Fina Building,  
736 Eighth Avenue S.W.,  
Calgary, Alberta T2P 1H4  
Telephone - (403) 269-2511  
Telex - 03-826866

## SUBSIDIARY COMPANIES

Amerco Investments Limited  
Merland Resources, Inc.  
Northwest Oils Limited  
Parquet Flooring Company Limited

## AUDITORS

Peat, Marwick, Mitchell & Co.  
Calgary, Alberta

## BANKERS

The Royal Bank of Canada  
Calgary, Alberta

## REGISTRAR AND TRANSFER AGENT

Guaranty Trust Company of Canada  
Calgary, Alberta  
Toronto, Ontario  
Vancouver, B.C.

## DIRECTORS

Walter J. Adams, Calgary, Alberta  
Robert K. Dixon, Calgary, Alberta  
George E. Gathercole, Toronto, Ontario  
Robert Law, Q.C., Toronto, Ontario  
Brian D. Marshall, Toronto, Ontario  
Wilmot L. Matthews, Toronto, Ontario  
William O. Parlee, Q.C., Edmonton, Alberta  
Harry J. Richardson, Alton, Ontario  
George T. Smith, Toronto, Ontario  
Donald J. Wilkins, Toronto, Ontario

## OFFICERS

Robert K. Dixon, President  
Allan P. Markin, Vice-President, Operations  
Peter W. Kreutzer, Treasurer  
Robert Law, Q.C., Secretary

## SENIOR PERSONNEL

Douglas A. Weston, Exploration Manager  
George N. Betts, Land Manager  
James D. Herbison, Controller

The Annual Meeting of the Shareholders will be held on Wednesday, June 13, 1979 at 9:00 a.m. in the Main Ballroom, Holiday Inn, Downtown, Calgary, Alberta, Canada.





